UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
CONTINO, PAUL F

ART UNIT	PAPER NUMBER
2114	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		10/815,006	BALKMAN ET AL.
		Examiner	Art Unit
		Paul Contino	2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 March 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-29</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-29</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>31 March 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *5/23/04*

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: UNIVERSAL CONTROLLER AND GRAPHICAL USER INTERFACE FOR TESTING OF DEVICES.

Claim Objections

2.   Claim 1 is objected to because of the following informalities: line 8 states "receives" where a singular "receive" is more proper. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-8, 12-19, and 22-29 are rejected under 35 U.S.C. 102(e) as being anticipated by

Joo et al. (U.S. PGPub 2005/0232159).

        As in claim 1, Joo et al. discloses A graphical user interface (GUI) processor for selective

connection to one of at least two different test devices *(Figs. 1, 2A, and 4A; where elements 100*

and 700 are interpreted as test devices and elements 300 and 400 are interpreted as GUI

processors), the GUI processor comprising:

        an input interface for receiving instructions from a user *(Fig. 4A; paragraph [0049] and*

[0051], mouse and/or keyboard);

        a translator adapted to *(Fig. 4A; processing unit 420)*:

                receive the instructions input by the user *(Fig. 4A; paragraphs [0051] and*

[0052]);

                translate the instructions input by the user into test device commands based on a

type of test device connected to the GUI processor *(paragraph [0052])*;

                transmit the test commands to the test device and receive[[s]] test results from the

test device *(paragraph [0052])*; and

                convert the test results received from the test device into display controls *(Fig. 6;*

paragraph [0070], display controls "Initiate Tests" button, icons 920, etc.); and

        a display engine that receives the display controls from the translator and causes a display

to display the test results *(Figs. 4A, 4B, and 6; paragraphs [0051], [0056], [0070], and [0071],*

display units 426 and 456).

As in claim 2, Joo et al. discloses a test device that receives test commands and provides

test results, the test device being communicatively coupled to the GUI processor by a wired or

wireless communication link *(Fig. 1; paragraph [0026] and [0027])*.

As in claim 3, Joo et al. discloses the test device is adapted to perform a suite of tests on a

cable *(Figs. 1 and 6; paragraphs [0035] and [0070])*.

As in claim 4, Joo et al. discloses the suite of tests that can be performed by the test

device is a full suite of telecommunications tests *(Fig. 6; paragraphs [0035] and [0070], test

routines 1-K)*.

As in claim 5, Joo et al. discloses the suite of tests that can be performed by the test

device is a subset of a full suite of telecommunications tests *(Fig. 6; paragraphs [0035] and

[0070], test routines 7 and K)*.

As in claim 6, Joo et al. discloses the translator receives a signal indicative of the type of

test device connected to the GUI processor *(Fig. 6; paragraph [0070], where it is inherent that

in order to display results from a test device in the associated window interface, a signal was

received indicative of the type of test device)*.

As in claim 7, Joo et al. discloses the display engine receives the signal indicative of the

type of test device connected to the GUI processor and causes the display to present options to

the user that correspond only to capabilities that are available on the test device that is connected to the GUI processor *(Fig. 6; paragraph [0070], where it is interpreted that the test selections in the test module 2 window correspond only to test module 2; it is interpreted that the results for the test routines imply that a signal was received indicative of test module 2).*

As in claim 8, Joo et al. discloses signal communication and logic circuitry for communicating with the test device connected to the GUI processor and determining the test device type *(Figs. 1, 4A, 4B, and 6; paragraphs [0052] and [0070]).*

As in claim 12, Joo et al. discloses the translator executes software to translate the instructions input by the user into test device commands based on the type of test device connected to the GUI processor *(Figs. 4A and 6; paragraphs [0069] and [0070]).*

As in claim 13, Joo et al. discloses the translator executes logic software to convert the test results received from the test device into display controls based on the type of test device connected to the GUI processor *(Figs. 4A and 6; paragraphs [0069] and [0070]).*

As in claim 14, Joo et al. discloses the translator translates instructions into test device commands for telecommunications test devices configured to perform tests on telecommunications cables *(Figs. 1 and 6; paragraphs [0035] and [0070]).*

As in claim 15, Joo et al. discloses a method of controlling a test device selected from a plurality of test devices *(Figs. 1, 2A, and 4A; where elements 100 and 700 are interpreted as test devices)*, the method comprising:

receiving instructions from a user *(Fig. 4A; paragraph [0049] and [0051], mouse and/or keyboard)*;

translating the instructions input by the user into test device commands based on a type of test device being controlled *(paragraph [0052])*;

transmitting the test device commands to the test device *(paragraph [0052])*;

receiving test results from the test device *(paragraph [0052])*; and

displaying the test results *(Figs. 4A, 4B, and 6; paragraphs [0051], [0056], [0070], and [0071])*.

As in claim 16, Joo et al. discloses receiving a signal indicative of the type of test device being controlled *(Fig. 6; paragraph [0070], where it is inherent that in order to display results from a test device in the associated window interface, a signal was received indicative of the type of test device)*.

As in claim 17, Joo et al. discloses interrogating the test device being controlled to generate the signal indicative of the type of test device being controlled *(paragraph [0052])*.

As in claim 18, Joo et al. discloses converting the test results into display controls *(Fig. 6; paragraph [0070], display controls "Initiate Tests" button, icons 920, etc.)*; and

driving a display with the display controls to display the test results *(Fig. 6)*.

As in claim 19, Joo et al. discloses adjusting the display based on the type of test device being controlled to provide only options to the user that correspond to capabilities available on the type of test device being controlled *(Fig. 6; paragraph [0070], where it is interpreted that the test selections in the test module 2 window correspond only to test module 2; it is interpreted that the results for the test routines imply that a signal was received indicative of test module 2)*.

As in claim 22, Joo et al. discloses translating the instructions input by the user into test device commands is performed by executing logic software based on the type of test device being controlled *(Figs. 4A and 6; paragraphs [0069] and [0070])*.

As in claim 23, Joo et al. discloses converting the test results into display controls is performed by executing logic software based on the type of test device being controlled *(Figs. 4A and 6; paragraphs [0069] and [0070])*.

As in claim 24, Joo et al. discloses a telecommunications testing system for performing at least one test on a telecommunications cable *(Fig. 1)*, comprising:

a test device for performing a suite of tests on the telecommunications cable and generating test results *(Figs. 1, 4A, and 4B; paragraph [0069], test devices 100/700)*; and

a controller coupled to the test device *(Figs. 1, 4A, and 4B; paragraph [0069], controller 300/400)*, the controller:

determining the type of test device coupled to the controller *(Fig. 6; paragraphs [0069] and [0070])*;

providing a graphical user interface (GUI) and a display that represents only test capabilities available for the type of test device that is determined to be coupled to the controller *(Fig. 6; paragraph [0070], where it is interpreted that the test selections in the test module 2 window correspond only to test module 2; it is interpreted that the results for the test routines imply that a signal was received indicative of test module 2)*;

initiating performance of one of the suite of tests by the test device in response to user instructions *(paragraphs [0052] and [0069])*;

receiving the test results from the test device *(paragraphs [0052] and [0069])*; and

causing the display to display the test results *(Figs. 4A, 4B, and 6; paragraphs [0051], [0056], [0070], and [0071])*.

As in claim 25, Joo et al. discloses the controller is coupled to the test device by a wired connection *(Fig. 1; paragraph [0049])*.

As in claim 26, Joo et al. discloses the controller is coupled to the test device by a wireless connection *(Fig. 4B; paragraph [0055], where the laptop/desktop is interpreted as the controller)*.

As in claim 27, Joo et al. discloses the controller includes communication and logic circuitry to determine the type of test device coupled to the controller by interrogating the test device *(Fig. 6; paragraphs [0069] and [0070], where it is inherent that in order to display results from a particular test device in the associated window interface, a signal was received indicative of the type of test device)*.

As in claim 28, Joo et al. discloses the suite of tests that can be performed by the test device is a full suite of telecommunications tests *(Fig. 6; paragraphs [0035] and [0070], test routines 1-K)*.

As in claim 29, Joo et al. discloses the suite of tests that can be performed by the test device is a subset of a full suite of telecommunications tests *(Fig. 6; paragraphs [0035] and [0070], test routines 7 and K)*.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 9-11 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Joo et al. in view of Sutton et al. (U.S. Patent No. 5,629,687).

As in claim 9, Joo et al. teaches the limitations of the claim 1, including a GUI processor

and test devices. However, Joo et al. fails to teach of a lookup table. Sutton et al. teaches of a

first lookup table to translate the instructions input by the user into test device commands, the

first lookup table being selected from a first plurality of lookup tables based on the type of test

device connected to the GUI processor *(column 4 lines 49-51 and 62-65, column 5 lines 5-30,*

and column 7 lines 4-12, 19-26, 40-45, and 55-61, where it is interpreted that a relationship is

defined by a look-up table, and that there is a relationship which uniquely corresponds to each

control unit "test device").

It would have been obvious to a person skilled in the art at the time the invention was

made to have included the lookup tables as taught by Sutton et al. in the invention of Joo et al.

This would have been obvious because the invention of Sutton et al. offers an efficient and

universal means of controlling a collection of devices.

As in claim 10, Joo et al. discloses the translator employs a second lookup table to

convert the test results received from the test device into display controls, the second lookup

table being selected from a second plurality of lookup tables based on the type of test device

connected to the GUI processor *(Fig. 4; column 4 lines 49-51 and 62-65, column 5 lines 5-30,*

and column 7 lines 4-12, 19-26, 40-45, and 55-61, where it is interpreted that there are a first set

of relationships which correspond to the keypad being pressed to send a command, and a second

set of relationships which correspond to the received signals determining which keypad key to

light up).

As in claim 11, Joo et al. teaches the limitations of the claim 1, including a translator, a

GUI processor, and test devices. However, Joo et al. fails to teach of a lookup table. Sutton et

al. teaches of the translator employs a lookup table to convert the test results received from the

test device into display controls, the lookup table being selected from a plurality of lookup tables

based on the type of test device connected to the GUI processor *(column 4 lines 49-51 and 62-*

65, column 5 lines 5-30, and column 7 lines 4-12, 19-26, 40-45, and 55-61, where it is

interpreted that a relationship is defined by a look-up table, and that there is a relationship

which uniquely corresponds to each control unit "test device"; where the lit keypad keys are

interpreted as display controls).

It would have been obvious to a person skilled in the art at the time the invention was

made to have included the lookup tables as taught by Sutton et al. in the invention of Joo et al.

This would have been obvious because the invention of Sutton et al. offers an efficient and

universal means of controlling a collection of devices.

As in claim 20, Joo et al. teaches the limitations of claim 15. However, Joo et al. fails to

teach of a lookup table. Sutton et al. teaches translating the instructions input by the user into

test device commands is performed by employing a lookup table selected from a plurality of

lookup tables based on the type of test device being controlled *(column 4 lines 49-51 and 62-65,*

column 5 lines 5-30, and column 7 lines 4-12, 19-26, 40-45, and 55-61, where it is interpreted

that a relationship is defined by a look-up table, and that there is a relationship which uniquely

corresponds to each control unit "test device").

It would have been obvious to a person skilled in the art at the time the invention was

made to have included the lookup tables as taught by Sutton et al. in the invention of Joo et al.

This would have been obvious because the invention of Sutton et al. offers an efficient and

universal means of controlling a collection of devices.

As in claim 21, Joo et al. teaches the limitations of claim 15. However, Joo et al. fails to

teach of a lookup table. Sutton et al. teaches converting the test results into display controls is

performed by employing a lookup table selected from a plurality of lookup tables based on the

type of test device being controlled *(column 4 lines 49-51 and 62-65, column 5 lines 5-30, and*

column 7 lines 4-12, 19-26, 40-45, and 55-61, where it is interpreted that a relationship is

defined by a look-up table, and that there is a relationship which uniquely corresponds to each

control unit "test device"; where the lit keypad keys are interpreted as display controls).

It would have been obvious to a person skilled in the art at the time the invention was

made to have included the lookup tables as taught by Sutton et al. in the invention of Joo et al.

This would have been obvious because the invention of Sutton et al. offers an efficient and

universal means of controlling a collection of devices.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure:

    U.S. Patent 6,094,609 Arjomand discloses diagnostic testing with a user interface.

    U.S. PGPub 2003/0182601 Richardson discloses a GUI test interface.

    U.S. PGPub 2003/0038842 Peck et al. discloses multiple test devices.

    U.S. Patent 5,136,705 Stubbs et al. discloses testing of multiple devices.

    U.S. Patent 6,571,358 Culotta et al. discloses a test controller for testing a system.

    LabVIEW Real-Time Module User Manual.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Paul Contino whose telephone number is (571) 272-3657. The

examiner can normally be reached on Monday-Friday 9:00 am - 6:00 pm.

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PFC
11/8/2006

SCOTT BADERMAN
SUPERVISORY PATENT EXAMINER